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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,570	07/24/2003	Nozomu Tamoto	240602US0DIV	8107

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EXAMINER

POULOS, SANDRA K

ART UNIT PAPER NUMBER

1714

DATE MAILED: 08/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/625,570

Applicant(s)

TAMOTO ET AL.

Examiner

Sandra K. Poulos

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26,27 and 47-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26,27 and 47-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. All outstanding rejections and objections except for those described below are overcome by applicant's amendment filed 6/09/06.
2. The new grounds of rejection set forth below are necessitated by applicant's amendment. In particular, claim 1 has been amended so that the organic compound is further limited to be a saturated or unsaturated fatty acid, wherein this limitation was not previously presented. Thus the following action is properly made **FINAL**.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 47 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 47 recites "linoleic acid" among a list of possible fatty acids. It is the examiner's position that this phrase fails to satisfy the written description requirement of 35 USC 112, first paragraph since there does not appear to be a written description requirement of the phrase "linoleic acid" in the application as originally filed, *In re Wright*, 866 F.2d 422, 9 USPQ2d 1649 (Fed. Cir. 1989) and MPEP 2163. Applicant has

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not pointed to any portion of the specification, and examiner has not found any support for this phraseology in the specification as originally filed. While there is support for the other fatty acids in the specification, there is no support specifically for linoleic acid.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 47 and 49 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 47 depends from claim 26 which discloses that the organic compound is a fatty acid, however, claim 47 lists "maleic acid anhydride" among those that may be selected to be the organic compound. Although an anhydride is capable of forming an acid, the anhydride itself is not considered an acid.

Claim 49 recites the limitation "the inorganic filler". There is insufficient antecedent basis for this limitation in the claim.

Double Patenting

5. Claims 26 and 47 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 60 of copending Application No. 10/827,376 (published as US 2004/0197688). Although the conflicting claims are not identical, they are not patentably distinct from each other because of the explanation below.

Claim 60 of copending Application No. 10/827,376 is drawn to a coating liquid for an outermost layer of an electrophotographic photoreceptor comprising a filler, a polycarboxylic acid having an acid value of from 10 to 700 mgKOH/g, a binder resin, and plural organic solvents.

The current claims are drawn to a saturated or unsaturated fatty acid which the claims of 10/827,367 use polycarboxylic acid instead. The current claims further specific mono and di-carboxylic acids. Dicarboxylic acid (in particular, adipic acid) is considered a polycarboxylic acid, which is defined as an organic acid containing two or more carboxyl groups.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 26-27, 47-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2000-019764 (wherein the JPO abstract and machine translation are used hereafter).

JP 764 discloses an undercoating for an eletrophotographic photoreceptor (abstract). It is noted that the intended use of "for an *outermost* layer of an electrophotographic photoreceptor" has not been given patentable weight. Case law holds that "where a patentee defines a structurally complete invention in the claim body

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and uses the preamble only to state a purpose or intended use for the invention, the preamble is not a claim limitation." See *Rowe v. Dror*, 112 F.3d 473, 478, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997).

The coating contains stearic acid compound, such as zinc stearate, calcium stearate, and stearic acid (abstract; para 9, 50). Titanium oxide particles surface treated with metal oxide, such as alumina or zirconia are used (abstract). In addition, conductive fine particles can be used as a conductive base material with the binding resin, for example metal powders such as acetylene black and aluminum, nickel, iron, copper, zinc, and silver, or conductive titanium oxide, conductive tin oxide, etc (para 16). Solvents include isopropanol, acetone, methyl ethyl ketone, etc (para 20). Binding resins such as polyamide, polyurethane, silicone resin, etc are used (para 19). A ball mill containing zirconia balls is used (para 20, 45, 52, 57).

Although JP 764 discloses the use of solvents, it does not explicitly disclose using plural organic solvents. However, it would have been obvious to one of ordinary skill in the art to use a single solvent from the list or a combination thereof, furthermore, it is well settled that it is prima facie obvious to combine two ingredients, each of which is targeted by the prior art to be useful for the same purpose. *In re Lindner* 457 F.2d 506, 509, 173 USPQ 356, 359 (CCPA 1972).

While JP 764 does not disclose that the filler has a resistivity of not less than 10^{10} Ω -cm and is basic, and that the stearic acid has an acid value of 10-700 mgKOH/g, those chemical compounds would intrinsically meet the claimed limitation. Additionally,

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"from the standpoint of patent law, a compound and all its properties are inseparable," *In re Papesch*, 315 F.2d 381, 391, 137 USPQ 43, 51 (CCPA 1963).

Lastly, it is noted that claim 27 is a product-by-process claim and therefore "even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." See *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

While JP 764 does not explicitly disclose using an alumina ball mill but rather uses a titania ball mill, since both disclose the presently claimed composition and general method of making, it would have been obvious to one of ordinary skill in the art to obtain the same final product, absent a showing of criticality for the presently claimed process, and thereby arrive at the presently cited claim.

Response to Arguments

7. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection above.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

JP 04318855 (Derwent abstract): discloses zinc oxide with binder resin with salicylic acid and a solvent, for use on an electrophotographic photoreceptor.

JP 57157253: discloses electrophotographic photoreceptor with metal oxide, metal salt of stearic acid, solvents, and binder resin.

JP 57154246: discloses electrophotographic photoreceptor with higher fatty acid, solvent, and binder resin.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sandra K. Poulos whose telephone number is (571) 272-6428. The examiner can normally be reached on M-F 8:00-4:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Sandra K. Poulos



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